

U.S. Patent Application Serial No. 10/538,912
Amendment filed May 16, 2008
Reply to OA dated February 5, 2008

AMENDMENTS TO THE CLAIMS:

Please cancel claims 3, 4 and 10-16 without prejudice or disclaimer, and amend claims 1, 5, 6 and 9, as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): An immunoassay method in which a target substance in a specimen containing the target substance together with a competitive substance therein is assayed by the use of two types of antibodies, and which comprises

~~using the two types of the antibodies, i.e., providing~~ a first antibody and a second antibody which have the following properties: (i) the first antibody has affinity for the target substance and the competitive substance, (ii) the first antibody has a higher affinity for the target substance than for the competitive substance, (iii) the second antibody has a higher affinity for the competitive substance than for the target substance, and (iv) the affinity for the competitive substance of the second antibody is higher than the affinity for the target substance of the first antibody,

bonding the target substance and the competitive substance in the specimen to the first antibody and second antibody ~~adsorbed on a carrier, wherein the first antibody and second antibody are adsorbed on a carrier, or wherein the first antibody is adsorbed on a carrier and the second antibody is adsorbed on a carrier dispersed in a solution or is dissolved in a solution,~~ and then

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measuring the level of the bonded target substance to assay the target substance in said specimen,

wherein the target substance is an intact enzyme having an enzymatic activity, and the measurement of the level of the target substance bonded is the measurement of the amount of enzymatic activity of said intact enzyme, and

wherein the competitive substance is a substance not having said enzymatic activity.

Claim 2 (Original): An immunoassay method according to claim 1, wherein furthermore, the affinity for the target substance of the second antibody is higher than the affinity for the competitive substance of the first antibody.

Claims 3-4 (Canceled).

Claim 5 (Currently amended): An immunoassay method according to claim 3 or 4, wherein the competitive substance is an enzyme degradation product.

Claim 6 (Currently amended): An immunoassay method according to ~~any one of claims 3 to 4~~ claim 1, wherein the intact enzyme is tartrate resistant acid phosphatase 5b (TRACP 5b).

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Claim 7 (Previously presented): An immunoassay method according to claim 1, wherein the carrier is an insoluble solid support.

Claim 8 (Previously presented): An immunoassay method according to claim 1, wherein the carrier on which the first antibody is adsorbed is a solid support, and the second antibody is adsorbed on a carrier dispersed in a solution or is dissolved.

Claim 9 (Currently amended): A kit for immunoassay of a target substance in a specimen by the use of two types of antibodies, which comprises

~~the two types of the antibodies, i.e.,~~ a first antibody and a second antibody which have the following properties: (i) the first antibody has affinity for the target substance and a competitive substance, (ii) the first antibody has a higher affinity for the target substance than for the competitive substance, (iii) the second antibody has a higher affinity for the competitive substance than for the target substance, and (iv) the affinity for the competitive substance of the second antibody is higher than the affinity for the target substance of the first antibody,

wherein the first antibody and the second antibody are adsorbed on a carrier, or

wherein the first antibody is adsorbed on a carrier and the second antibody is adsorbed on a carrier dispersed in a solution or is dissolved in a solution.

Claims 10-16 (Canceled).